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| 09/964,129 | 09/25/2001 | Takeshi Ishizaki | 36992.00083 (HAL 187CIP) | 2009 |
| 23493 | 7590 | 09/25/2006 | | EXAMINER SHIN, KYUNG H |
| SUGHRUE MION, PLLC 401 Castro Street, Ste 220 Mountain View, CA 94041-2007 | | | ART UNIT | PAPER NUMBER 2143 |

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|---------------------------|-------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/964,129 | ISHIZAKI, TAKESHI |
| | Examiner Kyung H. Shin | Art Unit 2143 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 June 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4,8-15 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4,8-15,21-32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is responding to application papers filed 6/22/2006. Claims 1 – 4, 8 – 15, 21 - 32 are pending. Claims 21 - 32 are new. Claim 1, 2, 3, 4, 8 has been amended. Claim 5 - 7, 16 - 20 have been cancelled. Independent claims are 1, 21.

Response to Arguments

2. Applicant's arguments filed 6/22/06 have been fully considered but they are not persuasive.

2.1 The claims have been amended to include the terms “*first switch*” and “*second switch*”. The specification does not contain the term “*first switch*” or the term “*second switch*”. These terms are indefinite and lacks antecedent basis and therefore, violates the 112 requirements of a patent application since no definition exists in the specification for these terms. The claims will be interpreted to have the qualifiers designated in the specification, such as “*FC switch*” and “*virtual LAN switch*”. The referenced prior art provides citations, which are used to reject all claims limitations for applicant's invention.

2.2 The claims have been amended to include the term “*network*” with no qualifier. This term is indefinite and lacks antecedent basis and therefore, violates the 112 requirements of a patent application since no definition exists in the specification for this term. The specification contains the term “*network*” qualified by the adjective “*virtual private*” which designates a virtual private network. The

referenced prior art provides citations with are used to reject all claims limitations for applicant's invention.

2.3 The examiner has considered the applicant's remarks concerning an integrated services management system including a server, storage, and network management subsystem.

After an additional analysis of the applicant's invention, remarks, and a search of the available prior art, it was determined that the current set of prior art consisting of Gonda (6,662,221), Rao (6,674,756), Rekhter (6,526,056), Brenner (5,881,227), Blumenau (6,665,714), and Bradley (6,584,507) discloses the applicant's invention including disclosures in Remarks dated June 22, 2006.

Claim Rejection - 35 USC § 103

3. **Claims 1 - 4, 8 - 11, 13 - 15, 21 - 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gonda et al.** (US Patent No. 6,662,221) in view of **Rao et al.** (US Patent No. 6,674,756) and further in view of **Rekhter et al.** (US Patent No. 6,526,056) and further in view of **Brenner et al.** (US Patent No. 5,881,227) and further in view of **Blumenau et al.** (US Patent No. 6,665,714).

Regarding Claims 1, Gonda discloses a system, comprising:

- a) a connection to a network; (see Gonda col. 4, lines 48-53: VPN connectivity)

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- e) at least one volume; (see Gonda col. 6, lines 13-14: volume attached to server system)
- h) a network management subsystem which controls operation of said router; (see Gonda col. 4, lines 25-27; col. 3, lines 49-52: router utilized for VPN server and network management communications)
- i) a server management subsystem which controls operation of said first switch; (see Gonda col. 2, line 64 - col. 3, line 3: VPN server network management system)
- k) an integrated service management system which communicates with said network management subsystem, said server management subsystem and said storage management subsystem, wherein said integrated service management system manages an association between said network, said server and said volume. (see Gonda col. 3, lines 49-52: integrated services VPN network management system)

Gonda discloses wherein a server system. (see Gonda col. 2, line 64 - col. 3, line 3: VPN server system, OS software must be booted into a logical partition for load operating system). Gonda does not specifically disclose the usage of logical partitions, a virtual LAN utilizing one or more virtual routers, tag information for communications, and a switch for controlling services. In addition, Gonda discloses a management system for controlling a switch (see Gonda col. 14, lines 57-58; col. 3, lines 60-64: VPN switch utilized by VPN management

system). And, Gonda does not specifically disclose a storage management system. However, Brenner discloses:

- c) a plurality of logical partitions, such that the logical partitions are maintained logically separate from each other; (see Brenner col. 5, lines 5-8; col. 4, lines 45-50; col. 8, line 66 - col. 9, line 4: mapping between host and logical partition, mapping between host (i.e. customer)

And, Rao, Rekhter, and Brenner disclose:

- b) a router, coupled to said network connection, wherein said router maintains a virtual router, said virtual router configurable to be dedicated to a customer (see Rao col. 12, lines 6-11; col. 2, lines 28-30: VLAN switch, virtual LAN consisting of one or more virtual routers connecting VPNs; col. 9, lines 30-43: mapping between router and host), wherein the router receives packets from the network, each packet having a ID, wherein the router uses the network ID and a dedicated virtual routing table (see Rao col. 9, line 67 - col. 10, line 1; col. 20, lines 32-39: VPN IDs ; col. 2, lines 23-27: virtual router routing tables) to filter packets to the virtual router associated with the network ID, wherein the virtual router adds tag information (see Rekhter col. 3, lines 44-47: virtual router ; col. 4, lines 46-64: tag (i.e. label) information (i.e. forwarding) utilized within virtual router communications) based on the network ID to the packets before transmitting the packets to a virtual LAN switch, thereby enabling_virtual separation of packets (see Rao col. 9, lines 30-43; col. 2, lines 25-27: virtual router operate as separate and independent entities for transfer of packets) within the router and enabling IP

addresses spaces within a private address range to overlap between different clients; (see Rekhter col. 3, lines 44-49: virtual router ; col. 33, lines 39-42: VPN address space overlap)

- d) a first switch, coupled to said router and to said server, said first switch providing selectable forwarding of information from said virtual router to one of said plurality of logical partitions (see Brenner col. 5, lines 5-8: switch; col. 4, lines 45-50; col. 8, line 66 - col. 9, line 4: mapping between host and logical partition, mapping between host (i.e. authorized user, customer)) in accordance with virtual LAN configuration information mapping the virtual router to the logical partition (see Rao col. 12, lines 6-11; col. 2, lines 28-30; col. 9, lines 30-43: VLAN switch, virtual LAN consisting of one or more virtual routers, mapping between virtual router and host), said first switch using the tag information and LAN configuration information to forward the packets to the one of said plurality of logical partitions; (see Rekhter col. 3, lines 44-47: virtual router ; col. 4, lines 46-64: tag information (i.e. forwarding) utilized within virtual router communications) and virtual router, resulting in mapping between virtual router and host ; col. 33, lines 39-42; col. 2, lines 39-44: VPN address overlap)
- f) a second switch, wherein said second switch provides selectable interconnection between said one of said plurality of logical partitions and said at least one volume (see Brenner col. 5, lines 5-8: switch; col. 4, lines 45-50; col. 8, line 66 - col. 9, line 4: mapping between host and logical partition plus a mapping between host (i.e. customer) and virtual router), wherein the second switch uses a storage

table to determine an appropriate one of said at least one volume, to confirm rights of the logical partition to access the determined one of said at least one volume, and to forward the packets from the logical partition to the determined one of said at least one volume. (see Rekhter col. 3, lines 44-47: virtual router ; col. 4, lines 46-64: tag information (i.e. forwarding) utilized to forward packets within virtual router, VPN communications) (see Rao col. 12, lines 6-11; col. 2, lines 28-30; col. 9, lines 30-43: VLAN switch, authorized user (i.e. customer), virtual LAN, one or more virtual routers, VPN connections, mapping between virtual router and host) And, Blumenau discloses:

- j) a storage management subsystem which controls operation of said second switch; (see Blumenau col. 2, lines 4-12: data storage management system)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gonda to enable utilization of virtual LAN technology with virtual router capability as taught by Rao, and to enable the usage of tag (i.e. label) information in the forwarding communications utilizing virtual routers as taught by Rekhter, and to enable the creation, usage management information to implement logical partition technology as taught by Brenner, and to implement a storage management system as taught by Blumenau. One of ordinary skill in the art would be motivated to employ Rao in order to provide fault tolerant and efficient services within an network environment with increased number and variety of network traffic (see Rao col. 2, lines 6-9: "... *network switch capable of providing fault-tolerant and efficient*

services that will accommodate the increase in the number and the variety of network traffic ... "), and to employ Rekhter in order to enable virtual router technology at a considerable reduction in cost (see Rekhter col. 3, line 66 - col. 4, line 2: "... provide its customers the peer model's advantages at costs considerably lower than those that the conventional virtual-router approach exacts ... "), and to employ Brenner in order to enable the creation of multiple independent isolated processing environments (see Brenner col. 2, lines 43-48: "... create multiple production environments with the same non-interfering characteristics ... sufficiently isolated (so that one environment does not adversely affect the working of other environments) ... "), and to employ Blumenau in order to provide centralized data management and strengthen security by removal of trust requirement in accessing storage in network communications (see Blumenau col. 5, lines 33-38: "... data management to be centralized ... removes the need to trust the hosts seeking access to the storage system ... ").

Regarding Claim 2, Gonda discloses the system of claim 1, in response to receiving a request command to change system configuration, said integrated service management system analyzes said request command, determines new configurations of said subsystems and sends commands of said new configurations to related subsystems. (see Gonda col. 7, lines 51-56; col. 8, lines 7-14: request commands, configuration changes are processed and implemented)

Regarding Claim 3, Gonda discloses the system of claim 2, said network management

subsystem further comprising: a network interface module that receives commands from an integrated service management system (see Gonda col. 3, lines 60-64: integrated services management), a service order processing module that analyzes and executes the commands (see Gonda col. 12, lines 2-7; col. 12, lines 12-18: service order and command processing system), updates a table of virtual private network information, and sends new configuration information to said router through a control module (see Gonda col. 11, lines 41-47: update, maintain VPN information database; col. 7, lines 51-56: configuration changes are processed and implemented).

Regarding Claim 4, Gonda discloses the system of claim 2, said network management subsystem further comprising a network table, said network table having a network ID that identifies a specific network, an Address 1 and an Address 2 that hold IP addresses of two end points of said specific network (see Gonda col. 14, lines 17-23: VPN tunnel endpoints are maintained), a Protocol that specifies a network protocol that is used on said specific network (see Gonda col. 11, lines 41-47: specific VPN tunnel type, an Internet that indicates whether access to public Internet is permitted (see Gonda col. 4, lines 44-47: Internet access for VPN), and a network ID that is assigned to packets received over said specific network (see Gonda col. 14, lines 14-15: VPN (VLAN) identification information maintained).

Regarding Claim 8, Gonda discloses the system of claim 1, said integrated service management system further comprising: a network interface module that receives

requests to change configuration, a service order processing module that analyzes and executes requests to change configuration received by said network interface module (see Gonda col. 12, lines 2-7: service order configuration requests processed), updates related table cache in a service management database, and sends new configuration information using said network interface module. (see Gonda col. 7, lines 51-56: configuration changes are processed and implemented)

Regarding Claim 9, 10, Gonda discloses the system of claim 8, further comprising an operator console application, customer portal application that sends a request command to change service configuration to said integrated management system. (see Gonda col. 8, lines 7-14: configuration change requests are processed and implemented)

Regarding Claim 11, Gonda discloses the system of claim 8, said integrated service management system further comprising a service configuration table, said service configuration table having destination information. (see Gonda col. 8, lines 31-47: VPN connection destination information)

Regarding Claim 13, Gonda discloses an integrated services management system. Gonda does not disclose a storage table having volume, port, HBA, capacity identification and access information. However, Blumenau discloses the system of claim 8, further comprising a storage table, said storage table having a volume identifier

(see Blumenau col. 29, lines 46-53: volume identification), a port identifier, (see Blumenau col. 23, lines 2-7: port identification) an allowed host bus adapter(s) (HBAs) identifier (see Blumenau col. 8, lines 35-41: HBA identifiers), a capacity identifier (see Blumenau col. 29, lines 46-53: capacity parameter), and an access information (see Blumenau col. 2, lines 45-52: access information for storage management system).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gonda to implement a storage management system as taught by Blumenau. One of ordinary skill in the art would be motivated to employ Blumenau in order to provide centralized data management and strengthen security by removal of trust requirement in accessing storage in network communications. (see Blumenau col. 5, lines 33-38)

Regarding Claim 14, Gonda discloses the system of claim 8, said integrated service management system further comprising a service mapping table, said service mapping table having a customer identifier, a virtual private network identifier, a server identifier, and a volume identifier. (see Gonda col. 14, lines 3-8; col. 14, lines 14-15; col. 14, lines 51-53: customer identification, VPN Identification, server identification, volume identification)

Regarding Claim 15, Gonda discloses the system of claim 8, said integrated service management system further comprising a service status table, said service status table having a customer identifier, a virtual private network status, a server status, and a

volume status (see Gonda col. 14, line 16: VPN, server, volume status information; col. 14, lines 3-8; col. 14, lines 14-15: customer identification, VPN identification)

Regarding Claim 21, Gonda discloses a system, comprising:

- a) a connection to a network; (see Gonda col. 4, lines 48-53: VPN connectivity)
- e) at least one volume; (see Gonda col. 6, lines 13-14: volume attached to server system)
- h) a network management subsystem which controls operation of said router; (see Gonda col. 4, lines 25-27; col. 3, lines 49-52: router utilized for VPN server and network management communications)
- i) a server management subsystem which controls operation of said first switch; (see Gonda col. 2, line 64 - col. 3, line 3: VPN server network management system)
- k) an integrated service management system which communicates with said network management subsystem, said server management subsystem and said storage management subsystem, wherein said integrated service management system manages an association between said network, said server and said volume. (see Gonda col. 3, lines 49-52: integrated services VPN network management system)

Gonda discloses wherein a server system. (see Gonda col. 2, line 64 - col. 3, line 3: VPN server system, OS software must be booted into a logical partition for load operating system) Gonda does not specifically disclose the usage of logical

partitions, a virtual LAN utilizing one or more virtual routers, tag information for communications, and a switch for controlling services. In addition, Gonda discloses a management system for controlling a switch (see Gonda col. 14, lines 57-58; col. 3, lines 60-64: VPN switch utilized by VPN management system). Gonda does not disclose a storage management system.

However, Brenner discloses:

- c) a plurality of logical partitions, such that the logical partitions are maintained logically separate from each other; (see Brenner col. 5, lines 5-8; col. 4, lines 45-50; col. 8, line 66 - col. 9, line 4: mapping between host and logical partition, mapping between host (i.e. customer)

And, Rao, Rekhter, and Brenner disclose:

- b) a router, coupled to said network connection, wherein said router maintains a virtual router, said virtual router configurable to be dedicated to a customer (see Rao col. 12, lines 6-11; col. 2, lines 28-30: VLAN switch, virtual LAN consisting of one or more virtual routers connecting VPNs; col. 9, lines 30-43: mapping between router and host), wherein the router receives packets from the network, each packet having a ID, wherein the router uses the network ID and a dedicated virtual routing table (see Rao col. 9, line 67 - col. 10, line 1; col. 20, lines 32-39: VPN IDs ; col. 2, lines 23-27: virtual router routing tables) to filter packets to the virtual router associated with the network ID, wherein the virtual router adds tag information (see Rekhter col. 3, lines 44-47: virtual router ; col. 4, lines 46-64: tag

(i.e. label) information (i.e. forwarding) utilized within virtual router communications) based on the network ID to the packets before transmitting the packets to a virtual LAN switch, thereby enabling virtual separation of packets (see Rao col. 9, lines 30-43; col. 2, lines 25-27: virtual router operate as separate and independent entities for transfer of packets) within the router and enabling IP addresses spaces within a private address range to overlap between different clients; (see Rekhter col. 3, lines 44-49: virtual router ; col. 33, lines 39-42: VPN address space overlap)

- d) a first switch, coupled to said router and to said server, said first switch providing selectable forwarding of information from said virtual router to one of said plurality of logical partitions (see Brenner col. 5, lines 5-8: switch; col. 4, lines 45-50; col. 8, line 66 - col. 9, line 4: mapping between host and logical partition, mapping between host (i.e. authorized user, customer)) in accordance with virtual LAN configuration information mapping the virtual router to the logical partition (see Rao col. 12, lines 6-11; col. 2, lines 28-30; col. 9, lines 30-43: VLAN switch, virtual LAN consisting of one or more virtual routers, mapping between virtual router and host), said first switch using the tag information and LAN configuration information to forward the packets to the one of said plurality of logical partitions; (see Rekhter col. 3, lines 44-47: virtual router ; col. 4, lines 46-64: tag information (i.e. forwarding) utilized within virtual router communications) and virtual router, resulting in mapping between virtual router and host ; col. 33, lines 39-42; col. 2, lines 39-44: VPN address overlap)

f) a second switch, wherein said second switch provides selectable interconnection between said one of said plurality of logical partitions and said at least one volume (see Brenner col. 5, lines 5-8: switch; col. 4, lines 45-50; col. 8, line 66 - col. 9, line 4: mapping between host and logical partition plus a mapping between host (i.e. customer) and virtual router), wherein the second switch uses a storage table to determine an appropriate one of said at least one volume, to confirm rights of the logical partition to access the determined one of said at least one volume, and to forward the packets from the logical partition to the determined one of said at least one volume. (see Rekhter col. 3, lines 44-47: virtual router ; col. 4, lines 46-64: tag information (i.e. forwarding) utilized to forward packets within virtual router, VPN communications) (see Rao col. 12, lines 6-11; col. 2, lines 28-30; col. 9, lines 30-43: VLAN switch, authorized user (i.e. customer), virtual LAN, one or more virtual routers, VPN connections, mapping between virtual router and host)

And, Blumenau discloses:

j) a storage management subsystem which controls operation of said second switch; (see Blumenau col. 2, lines 4-12: data storage management system)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gonda to enable utilization of virtual LAN technology with virtual router capability as taught by Rao, and to enable the usage of tag (i.e. label) information in the forwarding communications utilizing virtual routers as taught by

Rekhter, and to enable the creation, usage management information to implement logical partition technology as taught by Brenner, and to implement a storage management system as taught by Blumenau. One of ordinary skill in the art would be motivated to employ Rao in order to provide fault tolerant and efficient services within an network environment with increased number and variety of network traffic (see Rao col. 2, lines 6-9), and to employ Rekhter in order to enable virtual router technology at a considerable reduction in cost (see Rekhter col. 3, line 66 - col. 4, line 2), and to employ Brenner in order to enable the creation of multiple independent isolated processing environments (see Brenner col. 2, lines 43-48), and to employ Blumenau in order to provide centralized data management and strengthen security by removal of trust requirement in accessing storage in network communications (see Blumenau col. 5, lines 33-38).

Regarding Claim 22, Gonda discloses the system of claim 21, in response to receiving a request command to change system configuration, said integrated service management system analyzes said request command, determines new configurations of said subsystems and sends commands of said new configurations to related subsystems. (see Gonda col. 7, lines 51-56; col. 8, lines 7-14: request commands, configuration changes are processed and implemented)

Regarding Claim 23, Gonda discloses the system of claim 22, said network management subsystem further comprising: a network interface module that receives

commands from an integrated service management system (see Gonda col. 3, lines 60-64: integrated services management), a service order processing module that analyzes and executes the commands (see Gonda col. 12, lines 2-7; col. 12, lines 12-18: service order and command processing system), updates a table of virtual private network information, and sends new configuration information to said router through a control module (see Gonda col. 11, lines 41-47: update, maintain VPN information database; col. 7, lines 51-56: configuration changes are processed and implemented).

Regarding Claim 24, Gonda discloses the system of claim 22, said network management subsystem further comprising a network table, said network table having a network ID that identifies a specific network, an Address 1 and an Address 2 that hold IP addresses of two end points of said specific network (see Gonda col. 14, lines 17-23: VPN tunnel endpoints are maintained), a Protocol that specifies a network protocol that is used on said specific network (see Gonda col. 11, lines 41-47: specific VPN tunnel type, an Internet that indicates whether access to public Internet is permitted (see Gonda col. 4, lines 44-47: Internet access for VPN), and a network ID that is assigned to packets received over said specific network (see Gonda col. 14, lines 14-15: VPN (VLAN) identification information maintained).

Regarding Claim 25, Gonda discloses the system of claim 21, said integrated service management system further comprising: a network interface module that receives requests to change configuration, a service order processing module that analyzes and

executes requests to change configuration received by said network interface module (see Gonda col. 12, lines 2-7: service order configuration requests processed), updates related table cache in a service management database, and sends new configuration information using said network interface module. (see Gonda col. 7, lines 51-56: configuration changes are processed and implemented)

Regarding Claim 26, 27, Gonda discloses the system of claim 25, further comprising an operator console application, customer portal application that sends a request command to change service configuration to said integrated management system. (see Gonda col. 8, lines 7-14: configuration change requests are processed and implemented)

Regarding Claim 28, Gonda discloses the system of claim 25, said integrated service management system further comprising a service configuration table, said service configuration table having destination information. (see Gonda col. 8, lines 31-47: VPN connection destination information)

Regarding Claim 30, Gonda discloses an integrated services management system. Gonda does not disclose a storage table having volume, port, HBA, capacity identification and access information. However, Blumenau discloses the system of claim 25, further comprising a storage table, said storage table having a volume identifier (see Blumenau col. 29, lines 46-53: volume identification), a port identifier,

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(see Blumenau col. 23, lines 2-7: port identification) an allowed host bus adapter(s) (HBAs) identifier (see Blumenau col. 8, lines 35-41: HBA identifiers), a capacity identifier (see Blumenau col. 29, lines 46-53: capacity parameter), and an access information (see Blumenau col. 2, lines 45-52: access information for storage management system).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gonda to implement a storage management system as taught by Blumenau. One of ordinary skill in the art would be motivated to employ Blumenau in order to provide centralized data management and strengthen security by removal of trust requirement in accessing storage in network communications. (see Blumenau col. 5, lines 33-38)

Regarding Claim 31, Gonda discloses the system of claim 25, said integrated service management system further comprising a service mapping table, said service mapping table having a customer identifier, a network identifier, a server identifier, and a volume identifier. (see Gonda col. 14, lines 3-8; col. 14, lines 14-15; col. 14, lines 51-53: customer identification, VPN Identification, server identification, volume identification)

Regarding Claim 32, Gonda discloses the system of claim 25, said integrated service management system further comprising a service status table, said service status table having a customer identifier, a network status, a server status, and a volume status (see Gonda col. 14, line 16: VPN, server, volume status information; col. 14, lines 3-8; col.

14, lines 14-15: customer identification, VPN identification)

5. **Claims 12, 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gonda-Rao-Rekhter-Brenner-Blumenau** and further in view of **Bradley et al.** (US Patent No. 6,584,507).

Regarding Claim 12, Gonda discloses an integrated management system comprising a server table, having a server identification, an address, a physical server identifier (see Gonda col. 14, lines 51-53: service unit (server) identification), a virtual LAN identifier, a logical partition (LPAR) identification, an operating system identifier, and CPU information. Blumenau discloses a management system further comprising a host bus adapter (HBA) identification (see Blumenau col. 2, lines 4-12; col. 8, lines 35-41: mapping information between volumes and physical devices, HBA information). Gonda and Blumenau do not disclose an application identification and operating system information. However, Bradley discloses the system of claim 8, an application identification and operating system information (see Bradley col. 3, lines 54-57: application identification; col. 16, lines 61-62: operating system information)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gonda to utilize an application server for application management as taught by Bradley. One of ordinary skill in the art would be motivated to employ Bradley in order to correctly certify the integration of applications within the network management system. (see Bradley col. 2, lines 64-67: "... certifying that the

connection information will correctly integrate the application program with the network management system ... certifying information that identifies the connection as certified ...")

Regarding Claim 29, Gonda discloses an integrated management system comprising a server table, having a server identification, an address, a physical server identifier (see Gonda col. 14, lines 51-53: service unit (server) identification), a virtual LAN identifier, a logical partition (LPAR) identification, an operating system identifier, and CPU information. Blumenau discloses a management system further comprising a host bus adapter (HBA) identification (see Blumenau col. 2, lines 4-12; col. 8, lines 35-41: mapping information between volumes and physical devices, HBA information). Gonda and Blumenau do not disclose an application identification and operating system information. However, Bradley discloses the system of claim 25, an application identification and operating system information (see Bradley col. 3, lines 54-57: application identification; col. 16, lines 61-62: operating system information)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gonda to utilize an application server for application management as taught by Bradley. One of ordinary skill in the art would be motivated to employ Bradley in order to correctly certify the integration of applications within the network management system. (see Bradley col. 2, lines 64-67)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

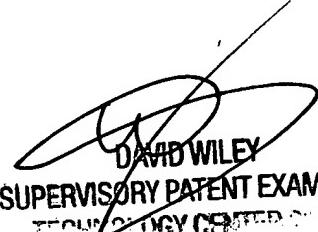
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9:30 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KHS
Kyung H Shin
Patent Examiner
Art Unit 2143

KHS
September 15, 2006


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER